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SHORT COMMUNICATIONS

Development of competency models for assessors and simulators in high-stakes selection processes

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Abstract

Background: Selection for entry into UK medical specialty training is a high-stakes, high-volume process. For selection into General Practice, a large number of assessors and simulators are involved in the delivery of the selection centre, which represents the final stage of selection.

Aim: In order to standardize and quality-assure assessor and simulator involvement in the process, we developed two competency models outlining the knowledge, skills and attributes associated with each role using a previously validated job analysis methodology.

Results: The final qualitative analysis resulted in two competency models, each encompassing eight competency domains. In general, results from a validation questionnaire demonstrated positive feedback from various regional recruitment leads in the UK ($n = 14$).

Conclusion: Both models are currently being used in practice for quality assurance and training purposes. We conclude that the competency models can be used in three ways: (1) recruiting assessors/simulators; (2) in measuring performance of assessors/simulators and highlighting areas for potential development; and (3) they can be used for training assessors/simulators.

Introduction

Research evidence shows that selection centers (SCs) are a good indicator of future job performance (Patterson et al. 2005; Lievens & Patterson 2011), however, in large-scale recruitment there is a greater challenge in attaining standardization across different assessment days and locations to ensure fair and consistent treatment of applicants. For example, assessors, and potentially simulators, can be a major source of error during an interview or selection centre process (Chen 2006).

This study presents a case study from the UK General Practice (GP) selection process which is a three-stage, large-scale validated selection process (Patterson et al. 2009); attracting around 6000 applicants per year for approximately 3000 posts. The final stage of the process, a selection centre, involves a written exercise and three simulated consultations, for which assessors and simulators are required. The SCs are typically held over a two- to three-week period across 16 regional locations, with up to 144 candidates taking part each day. For every 48 candidates, approximately 24 assessors and 24 simulators are needed. Given the risk of potential variability between different assessors and simulators, there is a growing demand for competency models related to each role, in order to increase standardization and calibration of the overall process.

The role of assessors in selection

In SCs, assessors are required to observe, record, and evaluate candidates' performance using standardized rating scales. Consequently, studies show that assessors' skills are vital to the success of any SC process (Chen 2006). For example, both "unqualified assessors" and "inadequate training" are thought to negatively influence the validity of SCs (Chen 2006, p. 254). Despite research recognizing the importance of training and developing proficient assessors (Brownell 2005), there is little research exploring the necessary knowledge, skills and attributes associated with success.

The role of simulators in selection

Selection centers often make use of several high-fidelity work sample tests, also known as "role plays". These have been shown to exhibit high criterion-related validities (Wyatt et al. 2010) and are popular in medical education and assessment, since simulations can be used to assess the competence of doctors, whilst providing a real-world context to understand complex patient care needs (Austin et al. 2006). Standardization of simulators' performance (who sometimes plays the role of a patient or colleague) ensures consistency across experiences, which is necessary for making fair and reliable comparisons between candidates. However, there has

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been virtually no research regarding the competencies required of a good simulator or how to select simulators.

Given the paucity of research in this area, the present study identifies the core competencies and behaviors required for both assessor and simulator roles, in the context of the UK GP selection process.

Methods

Participants and procedure

In accordance with best practice selection, competency frameworks for each role were devised through the use of validated job analysis techniques (Patterson et al. 2000, 2013). Accordingly, a convenience sample was invited to participate in a Critical Incident Technique interview (Flanagan 1954). In total, seventeen interviews were conducted with: lead assessors ($n=5$); recruitment administrators, who oversee delivery of the selection process ($n=5$); senior managers and trainers ($n=4$); and lead simulators ($n=10$). Interviews elicited information about the tasks and responsibilities; knowledge, skills and attitudes required; and behaviors associated with effective/ineffective performance, in each role.

On the basis of the interviews, behavioral indicators were extracted and recorded on cards, with codes indicating whether it related to effective/ineffective performance. Second, behavioral indicators were grouped into similar themes via a card-sort procedure. This resulted in a number of overarching competencies, defined as “a set of specific behavior patterns, including knowledge, skills and abilities, a person is required to have to perform effectively as an assessor/simulator”. Competencies were then labeled, using a post-hoc approach and the model was validated by an expert panel of subject matter experts ($n=5$).

Initial validation of competency models

The GP deans, responsible for recruitment in each regional location, were then asked to complete an evaluation questionnaire via email, asking their views on the appropriateness of both competency models; e.g. how the models were used in their recruitment process and suggestions for improvement. Fourteen respondents (representing 14 of the 16 regional locations) completed the questionnaire.

Results

The resulting competency models comprised eight competency domains for both assessor and simulator roles. Table 1 provides summary descriptions for these domains, classified into four areas, with examples of positive/negative behavioral indicators provided. As expected, there is substantial overlap between the competency domains for assessors and simulators; however, for each model the behavioral indicators vary, reflecting the specific knowledge, skills, behaviors and attitudes required for each role. For example, while “knowledge” requirements for an assessor include knowledge about the selection process, employment law and an understanding of the GP role; a simulator is only required to have

knowledge about the general principles of selection (including employment law) and the mechanics of the specific process.

Initial validation of the competency models

Assessor model

All respondents ($n=14$) agreed that the model had good potential to increase standardization and calibration of assessors, and most agreed that it was relevant (91%) and useful (82%). Some respondents remarked that it could be used to recruit assessors in their region, in particular for self-selection; as well as train assessors and improve quality assurance. In general, the model was positively received and appeared to provide legitimacy and credibility to the national process, as one respondent indicated, “there’s more confidence... we’ve now got something with external reference and authority. It gives legitimacy, everyone is doing the same”.

Simulator model

Respondents ($n=14$) agreed that the model was relevant (92%) and had the potential to increase the standardization (75%) and calibration (70%) of simulators. Similarly, some respondents commented that the model could be used for the recruitment, selection and training of simulators in their region. Feedback was also encouraging, for example, as with one respondent suggesting that the model “helped to legitimize and confirm the need to have a professional and common standard for role playing”.

Finally, respondents indicated that they planned to use both assessor and simulator competency models more extensively in the following annual national selection process.

Discussion

The assessor and simulator competency models were developed in response to a need for greater standardization and calibration of these roles in GP national selection. This was the first attempt to define the competencies required of assessors/simulators within this context; and the initial validation results indicate the models could improve the standardization of selection methodology delivery and the quality of the selection process overall. Moreover, the models could serve to provide a further degree of “professionalism” to process.

Practical Implications

The competency models have the potential to add value in three key areas: (1) They can be used in recruiting assessors/simulators, providing criteria with which to select the most suitable individuals, and can also be used for self-selection, where potential assessor/simulators can determine whether they are suitable and willing to fulfil the responsibilities; (2) They can be useful tools for measuring performance and highlighting areas for potential development. The level of detail provided offers a common language with which to describe the desirable (or indeed undesirable) behaviors associated with each role, with clear examples of each behavior; (3) They can be referred to when developing

Table 1. Descriptions of assessor & simulator competencies.

Competency	Type	Definition	Example positive indicator	Example negative indicator
Assessor Competencies				
Assessor Skills	Knowledge	Knowledge of the selection process, employment law and the specific context	Understands of the role of GP trainee & the context of the work environment	Fails to understand employment law & how it influences selection
Resilience	Technical skills	Understands principles of assessment for selection, uses ORCE model; relates observations to competencies	Perceptive in observations, attentive to whole interaction	Records vague unsubstantiated comments, writes illegible & inconsistent recordings
Decision Making	Behaviors	Remains focused throughout the day, able to cope with pressure/emotion	Refocuses after each candidate	Shifts focus throughout the day, becomes bored
Communication Skills	Behaviors	Confident and decisive; prepared to support decision if challenged	Comfortable making important decisions & abides by the outcomes	Uneasy in consensual decision making, prefers making decisions alone
Team Focus	Behaviors	Clear written and verbal communication; active listening and articulate expression	Communicates effectively, articulates points succinctly & gives effective examples	Timid or loud/forceful, verbose, gives ambiguous examples
Openness	Behaviors	Works well with assessors, simulators and administrators; not hierarchical	Respects all team members & encourages partnership	Exhibits intolerance or lack of respect for other team members
Commitment	Attitude	Takes actions to learn and develop by reviewing own performance and discussion with others	Critically evaluates own performance, prepared to change behaviour	Avoids opportunities for feedback, ignores feedback offered
Simulator Competencies				
Understanding of Selection	Attitude	Commitment to upholding high standard in terms of selection process and ensuring equal opportunities	Is committed to equal opportunities, treats all candidates the same	Mistrusts the system, regularly dismisses the outcome
Simulator Skills	Knowledge	Understanding of the process, general principles of selection and employment law, logistics	Aware of information selectors need to observe & record	Disregards schedule, is in wrong place at wrong time, fails to consider knock-on effects
Resilience	Technical skills	Understands simulator skills, performs calibrated & consistent simulations. Remains focused throughout the day, able to cope with pressure/emotion	Spends a sufficient amount of time rehearsing scenarios	Over-empathises with candidates, fails to keep appropriate distance
Observation Skills	Behaviors	Reacting quickly to candidate, adapts behaviour and style appropriately in response to the candidate	Comfortable making important decisions & abides by the outcomes	Shifts focus throughout the day, becomes distracted or bored
Communication Skills	Behaviors	Confident and decisive; prepared to support decision if challenged	Articulates point succinctly, presents evidence of behaviours & facts	Uneasy in consensual decision making, prefers making decisions alone
Team Focus	Behaviors	Clear written and verbal communication; active listening and articulate expression	Respects all team members & encourages partnership	Contributions to group discussions lack patient perspective
Openness	Behaviors	Works well with assessors, simulators and administrators	Open to change in order to help the process	Exhibits intolerance or lack of respect for other team members
Commitment	Attitude	Open to feedback from others, responds to direction & open to change	Discrete, maintains confidentiality at all stages, ensures paperwork is kept secure	Uncomfortable role-playing in front of others, resists direction

ORCE = Observe, Record, Classify, Evaluate.

assessor/simulator training sessions; if all UK locations use these models, it can aid calibration. In sum, using this kind of competency model approach in high-stakes selection processes could reduce the potential variability among assessors/simulators and ensure fair and consistent treatment of all candidates.

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